

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address; COMMESIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,275	07/09/2001	Arnd Krusche	450117-03255	7558
20999	7590 07/17/2006		EXAMINER	
FROMMER LAWRENCE & HAUG			ZHOU, TING	
	AVENUE- 10TH FL. K, NY 10151		ART UNIT	PAPER NUMBER
	-,		2173	<del></del>
			DATE MAILED: 07/17/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/901,275	KRUSCHE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Ting Zhou	2173				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 08	May 2006.					
· · · ·						
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>13-42 and 44-47</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>13-42 and 44-47</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and	or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:					

#### **DETAILED ACTION**

Page 2

1. The amendment filed on 8 May 2006 have been received and entered. The applicant has added claims 45-47. Claims 13-42 and 44-47 as amended are pending in the application.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 45-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Alimpich et al.
 U.S. Patent 6,281,896 (hereinafter "Alimpich").

Referring to claims 45-47, Alimpich teaches a method, interface and computer program comprising determining a connection of one or more devices to the network (printers that are involved in the printer production operations) (column 4, line 58-column 5, line 30); determining

availability of one or more multimedia services available via a respective one of the connected devices (the connected printers provide the availability of the multimedia service of printing) (column 4, line 58-column 5, line 30); generating a hierarchical view having at least one node representative of a respective one of the connected devices via which at least one of the multimedia service available (the parent node 59 of Figure 3) (column 4, line 58-column 5, line 30), and at least one sub-node, associated with a respective one of the at least one node, representative of a respective one of the at least one multimedia services available via the node with which the sub-node is associated (Printer 1-Printer 4, shown in Figure 3) (column 4, line 58-column 5, line 30); and displaying the hierarchical view (column 4, line 58-column 5, line 30 and further shown in Figure 3).

Page 3

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 13-15, 18-26, 28-30, 33-41 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft® Windows (hereinafter "Windows"), copyright 1998 (Screenshot 1) and Myer et al. U.S. Patent 6,615,088 (hereinafter "Myer").

Referring to claims 13, 28 and 44, Windows teaches a method, man-machine interface and a computer program comprising determining a connection of one or more devices to a

network, determining availability of one or more multimedia services available via one or more devices connected to the network, and displaying a hierarchical view representative of the one or more devices connected to the network and the one or more available multimedia services related thereto (Screenshot 2 shows a hierarchical display of devices that are connected and available to the computer network; for example, the displayed connected devices include the availability of devices providing related multimedia services such as an audio CD drive, a printer, etc. providing related multimedia services such as playing audio music, printing text and images, etc.). However, although Windows teaches devices connected to a network, Windows fails to explicitly teach that the devices connected to a network are non-computer home devices connected to a home network. Myer teaches an interface for a plurality of devices connected to a network (Myer: column 3, lines 1-38 and Figure 6D) similar to that of Windows. In addition, Myer further teaches the devices connected to a network are non-computer home devices connected to a home network (users can monitor and control various devices in her home environment, such as non-computer home devices including air conditioning, video equipment, audio equipment, etc.) (Myer: column 3, lines 1-38, column 4, lines 28-50 and Figures 6A-6F and 7A-7C). It would have been obvious to one of ordinary skill in the art, having the teachings of Windows and Myer before him at the time the invention was made, to modify the interface for displaying a hierarchical view of devices connected to a network and multimedia services related thereto of Windows to include the interface for displaying and monitoring home devices connected to a home network taught by Myer, in order to obtain an interface that displays a hierarchical view of home devices connected to a home network and multimedia services related thereto. One would have been motivated to make such a combination in order to allow users to

easily monitor and control aspects of his or own home remotely; for example, this combination allows users to monitor and ensure that security in her home has not been breached from anywhere in the world.

Referring to claims 14 and 29, Windows, as modified, teach determining a connection of all devices connected to the network (the Microsoft Windows Explorer display shown in Screenshot 2 shows all of the devices, software and functions associated with and connected to the computer system).

Referring to claims 15 and 30, Windows, as modified, teach determining availability of all multimedia services available via devices determined to be connected to the network (the Microsoft Windows Explorer display shown in Screenshot 2 shows all of the devices, including those devices that provide multimedia services such as the printer, software and functions associated with and connected to the computer system).

Referring to claims 18 and 33, Windows, as modified, teach operating the one or more devices and the one or more available multimedia services represented in the hierarchical view responsive to a user operation including a drag and drop operation, a cut and paste operation, and a copy and paste operation (Screenshot 3 shows the user can perform operations such as cut and copy to the multimedia service associated with the audio CD drive in which 16 tracks are displayed; furthermore, Screenshot 4 shows the paste operation and Screenshot 5 shows the drag and drop operation).

Referring to claims 19 and 34, Windows, as modified, teach communicating multimedia data (selecting a track shown in Screenshot 6 to play the corresponding media file).

Referring to claims 20 and 35, Windows, as modified, teach communicating multimedia data using a device capable of providing the one or more multimedia services (for example, if one of the audio tracks in Screenshot 6 is selected by the user, then the system will provide the multimedia service, or play the selected track, using an appropriate audio player, as shown in Screenshot 7).

Referring to claims 21 and 36, Windows, as modified, teach selecting one device from the hierarchical view representation of the one or more devices connected to the network (selecting one of the devices from the hierarchical display, such as selecting "Audio CD (E:)" in Screenshot 6), selecting one multimedia service from the hierarchical view representation of the one or more available services (selecting one of the multimedia tracks shown in Screenshot 6), displaying a context sensitive menu associated with the one selected device and the one selected multimedia service (displaying the context sensitive menu associated with the selected track from the selected device, as shown in Screenshot 8), and operating the one selected device and the one selected multimedia service in accordance with a selection from the context sensitive menu (for example, if the user selects the play option from the context sensitive menu shown in Screenshot 8, then the system will play the selected audio track).

Referring to claims 22 and 37, Windows, as modified, teach communicating multimedia data involving an operated device (playing the audio track in the Audio CD (E:) device)

(Screenshot 7).

Referring to claims 23 and 38, Windows, as modified, teach communicating multimedia data using a device capable of providing the one or more multimedia services (as shown in Screenshot 7, the selected audio file is played using an appropriate audio player).

Referring to claims 24 and 39, Windows, as modified, teach the hierarchical view is organized in accordance with predetermined, user-selectable rules (as shown in Screenshot 9, the items in the hierarchical display arrangement can be organized and displayed according to user preferences, such as by name, date, size, type, etc.).

Referring to claims 25 and 40, Windows, as modified, teach the hierarchical view is organized according to the kind of devices connected to the network (as shown in Screenshots 6 and 10, devices are grouped together by type such that audio track files are displayed with other audio track files and printer devices are displayed with other printer devices, etc.).

Referring to claims 26 and 41, Windows, as modified, teach the hierarchical view is organized according to the kind of multimedia services available via devices connected to the network (as shown in Screenshot 10, the multimedia services provided by the printer devices are organized according to the type of printers, such as Cannon, HP, etc.).

4. Claims 16-17 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft® Windows (hereinafter "Windows"), copyright 1998 (Screenshot 1) and Myer et al. U.S. Patent 6,615,088 (hereinafter "Myer"), as applied to claims 13 and 28 above, and Battat et al. U.S. Patent 5,958,012 (hereinafter "Battat").

Referring to claims 16 and 31, Windows and Myer teach all of the limitations as applied to claims 13 and 28 above. Specifically, Windows and Myer teach one or more sub-networks integrated into the network, where the hierarchical view is representative of the sub-networks, and respective representations of the sub-networks are of higher hierarchical order than devices and multimedia services thereof (Screenshot 2 shows the hierarchical display of sub-networks

within the network, such as sub-networks "C:" and "Removable Disk (D:)" under the network "My Computer"; furthermore, the above mentioned sub-networks of "C:" and "Removable Disk (D:)" are higher in the hierarchical display than multimedia devices and services such as "Audio CD (E:)" and "Printers"). However, Windows and Myer fail to explicitly teach the use of a bridge to integrate the sub-networks into the network. Battat teaches a user interface that provides a visualization and management of connected components of a computer network in a tree-like structure (Battat: column 4, lines 47-59, column 16, lines 46-50 and Figure 10B) similar to that of Windows and Myer. In addition, Battat further teaches integrating sub-networks and various components of the network via bridges (Battat: column 18, lines 52-65). It would have been obvious to one of ordinary skill in the art, having the teachings of Windows, Myer and Battat before him at the time the invention was made, to modify the interface for displaying information relating to a network of Windows and Myer to include the integration of network components via the use of communication devices such as bridges, taught by Battat. One would have been motivated to make such a combination in order to have the versatility to be able to integrate various kinds of networks, provided by communication devices such as bridges, which facilitate the interconnection of numerous different types of networks; for example, PC computers can be connected to home appliances such as a VCR and also to an electronic device such as a Walkman.

Referring to claims 17 and 32, Windows, as modified, teach the hierarchical view is organized according to the kind of sub-networks connected to the network (the sub-networks are grouped according to the kind of devices within it; for example, the hierarchical view of the

network "My Computer" contains the separate sub-networks of "3½ Floppy (A:)", "(C:)", "Removable Disk (D:)" etc., as shown in Screenshot 2).

5. Claims 27 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft® Windows (hereinafter "Windows"), copyright 1998 (Screenshot 1) and Myer et al. U.S. Patent 6,615,088 (hereinafter "Myer"), as applied to claims 13 and 28 above, and Saito et al. U.S. Patent 6,523,696 (hereinafter "Saito").

Referring to claims 27 and 42, Windows and Myer teach all of the limitations as applied to claims 13 and 28 above. However, Windows and Myer fail to explicitly teach the use of audio video command (AV/C) protocol for controlling the connected devices and/or services. Saito teaches an interface that displays information regarding interconnected devices and services in a network (Saito: column 15, lines 18-30, column 22, lines 41-65 and Figures 5 and 13) similar to that of Windows and Myer. In addition, Saito further teaches the use of AV/C protocol for controlling components (Saito: column 3, lines 58-67 and column 13, lines 49-56). It would have been obvious to one of ordinary skill in the art, having the teachings of Windows, Myer and Saito before him at the time the invention was made, to modify the method for displaying information relating to a network of Windows and Myer to include the use of AV/C protocols taught by Saito. It would have been advantageous for one to utilize such a combination in order to display and control more types of devices, including appliances and electronics that input and output audio and video commands. The user would have the added ability to monitor their home appliances such as the TV or VCR.

Application/Control Number: 09/901,275 Page 10

Art Unit: 2173

# Response to Arguments

6. Applicant's arguments filed 8 May 2006 have been fully considered but they are not persuasive.

- 7. The applicant argues that although the CD and Printers icons of Windows (Screen 2) represent multimedia services related to the computer device "My Computer", these icons do not represent available multimedia services because these icons are permanent and exist whether or not these services are available. The examiner respectfully disagrees. Screenshot 2 shows a hierarchical display of devices and their corresponding multimedia services that are connected and available to the computer network; for example, Screenshot 2 shows the hierarchical display of devices connected to the network, such as the audio CD-drive (in other words, there is a CD drive that is part of the computer that is capable of playing music); the CD-drive is capable, i.e. available for providing multimedia services such as playing a CD. Even if no CD is inserted, the CD-drive device is still connected to the computer network and is still capable/available for the multimedia service of playing CDs.
- 8. Furthermore, the applicant argues that there is no substantial evidence, nor clear and particular evidence of motivation for combining Windows and Myer. The examiner respectfully disagrees. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the

knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Myer teaches a graphical user interface that displays devices connected to the network; therefore, both Windows and Myers teaches interfaces that displays connected devices. In addition, Myer specifically states in column 4, lines 28-50 that it would have been advantageous to have an interface for displaying devices connected in a home network because it allows users to easily monitor and control aspects of his or own home remotely; for example, this combination allows users to monitor and ensure that security in her home has not been breached from anywhere in the world. Furthermore, with the increase in automation of home devices such as the refrigerator, microwave, etc., this combination would provide a clear and organized graphical user interface that allows users to easily control devices in his/her home from anywhere.

- 9. Applicant's arguments with respect to claims 45-47 have been considered but are moot in view of the new ground(s) of rejection.
- 10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (571) 272-4058. The examiner can normally be reached on Monday - Friday 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached at (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Page 12

TZ